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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,335	07/29/2003	Kun-Tsung Huang	MR957-1370	6067

4586 7590 07/13/2004

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ELLICOTT CITY, MD 21043

EXAMINER

SAETHER, FLEMMING

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,335

Applicant(s)

HUANG, KUN-TSUNG

Examiner

Flemming Saether

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (US 2,343,283). Davis discloses an expansion screw comprising, a screw (5); an expansion sleeve (7) with a head (12) for receiving a tool (13) and elongated gaps (8) extending from an opposite end; an internally threaded expanding block (6) in the shape of a truncated cone having outer engaging surfaces (10) for fitting in the sleeve. The outer engaging surfaces of the block engaging inner portions of sleeve to in such a manner as to prevent relative rotation. The inner and outer surfaces of the sleeve being curved.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith (US 2,343,283). Smith discloses an expansion screw comprising, a screw (6); an expansion sleeve (11, 12) with a head (13) capable of receiving a tool and elongated gaps (formed between the sleeve sections) extending from an opposite end; an internally threaded expanding block (2) in the shape of a truncated cone having outer engaging surfaces for fitting in the sleeve. The outer engaging surfaces of the block engaging inner portions of sleeve to in such a manner as to prevent relative rotation.

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The outer engaging surfaces (4) are formed as flat planer sides (4) parallel to the longitudinal axis and the inner engaging portion having complementary flat sides.

Claims 1, 3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Draa (US 3,938,420). Draa discloses an expansion screw comprising, a screw (10); an expansion sleeve (6) with a head (a top end thereof) capable of receiving a tool and elongated gaps (between portions 15-18) extending from an opposite end; an internally threaded expanding block (7) in the shape of a truncated cone having outer engaging surfaces (57-60) for fitting in the sleeve. The outer engaging surfaces of the block engaging inner portions of sleeve to in such a manner as to prevent relative rotation. The outer engaging surface is formed as a sloping flat surface while the inner engaging portion (52 or 53) is formed as a flat surface. Draa further shows the outer surface of the sleeve to be flat (29a of 29b).

Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lovrinch (US 2,955,504). Lovrinch discloses an expansion screw comprising, a screw (48); an expansion sleeve (24) with a head (at an upper end thereof) capable of receiving a tool and elongated gaps (38) extending from an opposite end; an internally threaded expanding block (12) in the shape of a truncated cone having outer engaging surfaces (22) for fitting in the sleeve. The outer engaging surfaces of the block engaging inner portions (36) of sleeve to in such a manner as to prevent relative rotation. The outer engaging surface is formed of the both lengthwise trenches and

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protrusions alternating with one another with the inner engaging portion formed of mating lengthwise trenches and protrusions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 681,817) in view of Lovrinch (US 2,955,504). Smith discloses an expansion screw comprising, a screw (6); an expansion sleeve (11, 12) with a head (13) capable of receiving a tool and elongated gaps (formed between the sleeve sections) extending from an opposite end; an internally threaded expanding block (2) in the shape of a truncated cone having outer engaging surfaces for fitting in the sleeve. The outer engaging surfaces of the block engaging inner portions of sleeve to in such a manner as to prevent relative rotation. The outer engaging surfaces (4) are formed as flat planer sides (4) parallel to the longitudinal axis and the inner engaging portion having complementary flat sides. Smith does not disclose the flat sides including lengthwise trenches as grooves. Lovrinch discloses an expansion screw comprising an outer engaging surface of a block (12) engaging inner portions of sleeve (24) in such a manner as to prevent relative rotation. The outer engaging surface (22) is formed of the

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both lengthwise trenches and protrusions alternating with one another with the inner engaging portion (36) formed of mating lengthwise trenches and protrusions. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the engaging surfaces, including the flat sides, of Smith with mating protrusions and trenches as disclosed in Lovrinch in order to further prevent relative rotation. The addition of the protrusions and trenches would advantageously enhance the inability of the block to rotate relative to the sleeve.

Conclusion

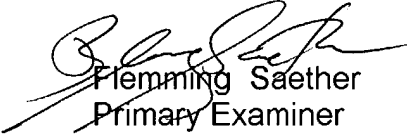
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Flemming Saether
Primary Examiner
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